

Registration Form

Name: _____

Designation: _____

Qualification: _____

Experience: _____ (if applicable)

Department: _____

Address for Communication:

City: _____ Pin Code: _____

Mobile No.: _____

E-mail: _____

Category of Participant:

- Faculty/Student/Research Scholar of NITK
- Faculty/Student/Research Scholar outside NITK
- Industry Participant

I agree to attend the course for the entire duration.

Place:

Date: _____ Signature of the Applicant

Note: On attending the course "in full", the participants will be given participation certificate.



NITK Surathkal Mangalore

Address for Correspondence

K. Chandrasekaran

Professor, Dept. of Computer Science and Engineering,
National Institute of Technology Karnataka, Surathkal,
Srinivasnagar PO, Surathkal, Mangalore 575025 ,
Karnataka, India.

Phone: +91-824 2474000 Extn 3400

Fax: +91-824 2474033

Email: techevents.cse@gmail.com

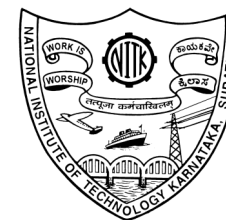
Point of Contact

- Marimuthu C, Research Scholar (+91-9008581809)
- Raghavan S, Research Scholar (+91-7338513541)

Semantic Web

GIAN (MHRD, Govt. of India)
Supported Advance Level Course

Organized at



NITK Surathkal, Mangalore

Supported by



सत्यमेव जयते
Government of India
Ministry of Human Resource
Development

**Global Initiative of Academic
Network (GIAN)**

Date: April 11, 2016 to April 15, 2016

Venue: NITK Surathkal

<http://cse.nitk.ac.in/upcoming-events/gian/semantic-web/>

Semantic Web

GIAN (MHRD, Govt. of India) Supported Advance Level Course @ NITK Surathkal

Course Overview

The current World-Wide Web enables an easy, instant access to a vast amount of online information. However, the content in the Web is typically for human consumption, and is not tailored for machine processing. The Semantic Web is hence intended to establish a machine-understandable Web, and is currently also used in many other domains and not only in the Web. The usage of common ontologies increases interoperability between heterogeneous data sets, and the proprietary ontologies with the additional abstraction layer facilitate the integration of these data sets. Therefore, we can argue that the Semantic Web is ideally designed to work in heterogeneous Big Data environments.

There are masses of Semantic Web data freely available to the public - thanks to the efforts of the linked data initiative. According to <http://stats.lod2.eu/> the current freely available Semantic Web data is approximately 90 billion triples in over 3,300 datasets, many of which are accessible via SPARQL query servers called SPARQL endpoints. Everyone can submit SPARQL queries to SPARQL endpoints via a standardized protocol, where the queries are processed on the datasets of the SPARQL endpoints and the query results are sent back in a standardized format. Hence not only Semantic Web data is freely available, but also distributed execution environments for Semantic Big Data are freely accessible. This makes the Semantic Web an ideal playground for Big Data research.

In this course the students first learn the basics of the Semantic Web and especially the core of the family of Semantic Web languages. Afterwards the instructor introduces the technologies and approaches for efficient data handling, query processing and rule evaluation specialized to the Semantic Web world.

Course Contents

1. Introduction to and Motivation of the Semantic Web
2. Data Format RDF and Ontology Language RDF Schema
3. Query Language SPARQL
4. Rule Interchange Format (RIF)
5. Web Ontology Language (OWL)
6. Web Ontology Language (OWL) - OWL2RL inference rules in RIF
7. Query Processing Strategies for Semantic Web
8. Evaluation Strategies for Semantic Web Rules and Tableau-Approach
9. Parallelization of Semantic Web Databases
10. Processing Strategies for Semantic Web Data in the Cloud

Teaching Faculty



Sven Groppe is currently an Privatdozent Dr. rer. nat. habil. of Institute of Information Systems (IFIS) at University of Lübeck, Germany. His research interests are in the broad area of Semantic Web Databases. Sven Groppe currently serves or has served on the program committees of IEEE CloudCom, ICEIS, XANTEC, ICAART, DEXA, KEOD, IDEAS, . He is the Workshop Chair of Semantic Big data at SIGMOD 2016. He also serves as a reviewer for various journals including ACM Transactions on Internet Technology (TOIT), IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE), IEEE Transactions on Services Computing, Journal of Systems and Software (JSS). He was the ex-member of W3C working groups: Rule Interchange Format Working Group and RDF Data Access Working Group. For more information: <http://www.ifis.uni-luebeck.de/~groppe>.

Important Dates

Registration Starts	10/03/2016
Registration Closes	04/04/2016
Selection Notification	05/04/2016
Event Date	11/04/2016 to 15/04/2016

Registration Details

Participants from

Industry / Research Rs. 10,000/-

Academic Institutions Rs. 5,000/-

Note: Faculty / student of NITK will be admitted at free of cost

Payment Mode: DD in favor of The Director NITK Surathkal, payable through any nationalized bank at Surathkal / Mangalore.

Scanned DD and the Duly filled Registration form must be uploaded during the online registration on or before April 04, 2016.

Max. no. of Participants: Limited to 50

Registration Link: <http://cse.nitk.ac.in/upcoming-events/gian/semantic-web/registration>

The above fee includes all instructional materials, computer use and internet facility. The participants will not be given any TA/DA and boarding / lodging support. Participant can bring their laptop for effective utilization of course delivery.